State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL BUREAU OF WATER COMPLIANCE & ENFORCEMENT
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PHILIP D. MURPHY
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CERTIFIED MAIL RRR
7018 2290 0001 5113 6194

January 3, 2020

George Bakun. P.E
Phillips 66 - Bayway Refinery
1400 Park Ave.
Linden, New Jersey 07036

RE: Compliance Evaluation Inspection- Surface Water Discharge Permit
Phillips 66 - Bayway Refinery
NJPDES Permit No. NJ0001511 - DSW
PROGRAM INTEREST ID # 46318
PROGRAM: Water Quality
Compliance Activity # SCI 190001
Linden City, Union County

Dear Mr. Bakun:

Compliance Evaluation Inspections of your facility were conducted on June 12, 13 & 20, October 29 & 30 2019 by a representative of this Bureau. A representative of the USEPA joined the June inspections. A copy of the completed inspection report is enclosed for your records.

The following deficiencies were noted during the inspection and the data review that followed:

1. Improper operation of the Polypropylene ("PE") Pellet Separator causing an unpermitted discharge of PE to the Morses Creek on June 20. The separator treats water used to wash the interior of rail cars previously filled with PE pellets and fluff. Wash water enters one end of a large rectangular separator which traps floating pellets and allows water to discharge through an underflow partition at the other end. During the June 20 inspection, P66 had installed several aerators in the chamber to stir up the water, reportedly to move the pellets to a designated area for removal. However, the mixing motion of the aerators churned the PE pellets into the water

column, negating the role of the chambers final partition to capture the floating pellets. A circular screen designed to fit over the chamber outfall was hanging from a railing in the immediate vicinity and not in use. A steady flow laden with pellets was observed discharging from the chamber. See the attached photos. Video was also collected.

The Department first became aware of these pellets at a location in the Morses Creek near your DSN 005 outfall. A vactor truck was actively removing a large accumulation of floating pellets that had collected in a series of booms. This writer has not data to suggest what percentage of pellets were collected by these booms.

P66 reportedly removed the aerators from this treatment chamber soon after the June 20 inspection.

During the inspection on October 29, the separator appeared to be functioning. However, evidence of white PE fluff was noted along the walls of the final chamber. In addition, no final screen was in place to capture pellets that might escape.

PE pellets (though much fewer than June 20) were still noted at the same boomed collection area near DSN 005 in the Morses Creek during the October 29 inspection. See the attached photo.

Part IV.G.5.a of your Permit allows for the discharge from your Polypropylene Plant Pellet Separator because it is "clean in nature". The June 20 discharge of pellets from your improperly operated separator was far from "clean in nature", and a violation of your Permit. **See the attached NOV**.

P66 is hereby REQUIRED to create an O&M Manual for the proper operation and maintenance of this system and provide a copy to this writer within 30 days of receipt of this report. The O&M Manual shall specifically describe how this treatment system removes the PE pellets and fluff from the discharge. This writer is not convinced that the fluff material has the same buoyancy characteristics as the pellets. Furthermore, the Department strongly recommends that P66 add final treatment barriers, such as dual screens, to trap any pellets that might escape. The observations in the Morses Creek on October 29 show pellets are still escaping.

Finally, the Department recommends that a licensed N operator be assigned to oversee the operation of this treatment system. With your response to this inspection report, please provide this writer with the name of that responsible operator.

When your NJPDES Permit is renewed, this Bureau will suggest that this outfall from your PE plant receive a point source DSN designation with monitoring requirements. **To avoid this designation and ultimately comply with this deficiency, this Bureau recommends that P66 consider re-routing the discharge to your process sewer.**

2. During the inspection on June 20, an oily floating substance was trapped behind the boom at your DSN 004 outfall. See the attached photo. Reportedly, a vactor truck was dispatched to skim this material. On the date of the inspection, P66 was adding a pesticide called Clam-Trol (allowed by its Permit) to its salt water intake to kill Mollusca, Barnacles, Hydrozoa, Bryozoa, and Bacterial, Fungal and Algal Slime in its cooling water system. According to representatives of P66, Clam-Trol material is added annually. However, P66 is hereby REQUIRED to create BMPs for the collection and removal of this material at DSN 004 during times (and immediately afterwards if necessary) when this chemical is added.

   On the October 29 inspection, a light sheen was noted behind the boom at the DSN 004 outfall.

3. To the knowledge of this writer, the following process sewer overflows have occurred since the previous inspections were conducted in June and November 2017:

   a. During the June 13 inspection, an overflow was observed in the containment area between tanks 132 & 133. An oily sheen was observed on the surface, and the surrounding crushed stone was contaminated. See the attached photos. According to representatives of P66, a non-functioning valve caused this overflow. During the inspections conducted in October, this valve was still not fixed, however the area was remediated and replaced with clean stone. To the knowledge of the Department, the water/oil contained in this area did not flow to Morses Creek.

   b. Heavy rains occurred between June 22 and 23 2019, totaling nearly 4 inches in 24 hours. During that event, the process sewer on Refinery Ave overflowed from several manholes sending a sheen to DSN 004 via the poly ditch. Some sheen escaped the Dam 1 to the Arthur Kill. P66 estimates that 5 gallons of oil overflowed, with 1 gallon passing Dam 1. P66 properly notified the NJDEP Hotline and submitted a 5-day letter.

   c. During a heavy rain event on July 31, a sheen was noted past DSN 001. P66 representatives traced the sheen to a broken process sewer manhole that overflowed to the Railroad Avenue Ditch. P66 estimates that 5 gallons of oil overflowed, with 1 gallon passing Dam 1. P66 properly notified the NJDEP Hotline and submitted a 5-day letter. The broken process manhole was repaired. Thus no response to this deficiency is required.

   d. Though it has not occurred since the previous 2017 inspections to the knowledge of this writer, P66 has a history of overflows from a manhole in the Greater Elizabeth Culvert during periods of heavy rain.

   With your response to this inspection report, please indicate those steps that P66 has (or will) initiate to prevent a re-occurrence of overflows from locations in a. b. d. and other locations on the property. As noted in a. and b., these overflows can result in the release of petroleum to the surface waters of the State.

During periods of heavy rain, mechanical difficulties or maintenance, P66 can shuts down (fully or partially) its treatment plant tertiary filtration system. In 2019, this occurred on August 20, July 23, April 30 and March 6 totaling more than 6.7 MG. In 2018, this occurred on February 7, May 10 – 11, June 17-20, July 27-31, November 1-3, and November 8, totaling approximately 87 MG. Each day the system was not working, Phillips 66 voluntarily collected composite TSS samples from its DSN 002 outfall to meet the requirement in N.J.A.C. 7:14A-6.5(a)1. In addition, Phillips 66 voluntarily notified this writer via email within 5 days of each bypass. To the knowledge of this writer, no exceedance of the permitted TSS effluent limitation at DSN 002 occurred during any of the bypasses. Additional upgrades to the filtration system are now complete according to Phillips 66 representatives.

The Department hereby offers the following strong recommendations:

I. The Department is aware of many procedures implemented by P66 following hurricane Sandy. These include closing the doors and entrances to the salt water pump station and deploying barriers around the P66 and Infinium API Separators. However, the Department is not aware of P66 conducting recent drills to deploy these measures. The Department recommends that such drills be performed periodically and reviewed for their effectiveness.

II. Numerous trip hazards were noted at the DSN 001 Dam. Such hazards could compound during night visits by your operators in poor weather conditions.

The deficiencies noted herein have placed your facility in violation of the terms and conditions of your NJPDES permit and/or the New Jersey Water Pollution Control Regulations (N.J.A.C. 7:14A-1 et seq.). You are therefore REQUIRED to institute corrective measures. A written report concerning specific details of remedial measures to be instituted, as well as an implementation timetable, must be submitted to this Bureau within thirty (30) calendar days of the date of this correspondence.

Please address any questions to this writer at the address listed above, by telephone at (609)439-6422, or by email to Andrew.Coleman@dep.nj.gov.

Sincerely,

Andrew Coleman
Environmental Specialist III

C: Murray Lantner, EPA Region 2, Water Compliance Branch, 290 Broadway, 20th Floor, New York, NY 10007.

Enclosure

Compliance Evaluation Summary and Checklist with Included flag sorted by PI

Date Printed: 12/26/2019

Activity:	SCI 190001 *Standard Compliance Inspection (46318)
Title Description:	P66 DSW STP FY19 CEI
Start Date/Time:	06/12/2019 **End Date/Time:**
Program Interest:	PHILLIPS 66 CO 46318 (NJPDES) 1400 PARK AVE, LINDEN CITY, UNION COUNTY
Mailing Address:	1400 PARK AVE Linden NJ 07036
Responsibility Entity(s)	**Program Interests included in Inspection:**
Phillips 66 Co	46318 (Njpdes)
Block(s) and Lot(s):	Block 519 Lot 2, Block 515 Lot 1, Block 518 Lot 1, Block 520 Lot 1, Block 568 Lot 10, Block 580 Lot 42, Block 586 Lot 18, Block 134 Lot 6, Block 518 Lot 2, Block 520 Lot 3, Block 580 Lot 40, Block 581 Lot 1106, Block 519 Lot 1, Block 522 Lot 1, Block 523 Lot 2, Block 524 Lot 24, Block 524 Lot 9, Block 586 Lot 17, Block 586 Lot 6, Block 516 Lot 1, Block 517 Lot 1, Block 134 Lot 1, Block 586 Lot 10, Block 586 Lot 3.02, Block 520 Lot 4. . . .

Lead Investigator	Other Investigators	Persons Interviewed	Witnesses
Coleman, Andrew		George Bakun, Environmental Engineer, phone #908-523-5896, and cell - 973-769-5083.	Murray Lantner, USEPA Region 2, Water Compliance Branch, phone (212) 637-3976 (Office)

General Comments

Treatment Plant Updates:

1. P66 replaced the fixed aerators in its biox lagoon with floating ones. P66 is purchasing 4 directional floating aerators to add to its lagoons - to help mix the wastewater within.

2. Rapid sand filter 8630 was recently refurbished. Cleaned and coated, metal thickness checked, new valves. Back in service. Filter 8650 received several new valves to replace those that were leaking. Another filter will be taken off line in 2020.

3. During the June 13 inspection, P66 was running its recycle pit with 3 portable diesel pumps. All 3 permanent pumps are being rebuilt and will be returned to service too,

4. Clarifier 3 was down for repair and rehab during the 6/13 inspection. During the 10/29 inspection, it was back in operation. Another clarifier will be taken down in 2020 for rehab.

Inspection Attribute(s):	**Quantity(s)**
Number of Attributes: 0	

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46318 GDR 0 - General Discharge Requirements

Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
Are all violations reported to the Department as required in N.J.A.C. 7:14A-6.10?. [N.J.A.C. 7:14A- 6.10]	IC	Permittee is aware of reporting responsibilities.	DSW 160001 13 T
Does the facility employ a licensed operator who holds the appropriate classification of license to operate the treatment works?. [N.J.A.C. 7:10A-1.1]	IC	George Bakun, N-4 licensed operator. Anthony Leake is back-up with an N4. Other N operators on staff.	DSW 160001 21 T
Does the permittee have any discharges not authorized by a valid permit?. [N.J.A.C. 7:14A-6.2(a)1]	OC	Unpermitted discharge of PE pellets and fluff from the Polypropylene Plant, described by P66 to be a "clean discharge". See the cover letter and attached NOV.	DSW 160001 25 T
Has the permittee notified the Department's Examination and Licensing Unit of any changes in licensed operator status?. [N.J.A.C. 7:10A-1.1]	IC	No changes since previous inspection.	DSW 160001 23 T

46318 B 0 - Industrial Wastewater

Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
MONITORING REQUIREMENTS	H		DSW 160001 1 T
Were all analyses performed by a New Jersey Certified Laboratory? Indicate lab name(s). [N.J.A.C. 7:14A- 6.5(a)2]	IC	P66 Certified Lab analyzes TOC, TSS, pH, NH3-N, Sulfide and CPO under cert #20732. Bioassay conducted by American Aquatics, cert PA682. Remaining analysis by Test America Labs.	DSW 160001 3 T
Were analyses of wastewater performed in accordance with the appropriate analytical test procedures? . [N.J.A.C. 7:14A- 6.5(a)2]	IC		DSW 160001 4 T
Was sampling conducted in accordance with the Field Sampling Procedures Manual or other Department approved method?. [N.J.A.C. 7:14A-6.5(b)4]	NI	Sampling not witnessed by DEP.	DSW 160001 6 T

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46318 B 0 - Industrial Wastewater

Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
Was all monitoring conducted in accordance with Part III of the Permit?. [N.J.A.C. 7:14A- 6.5(b)]	IC		DSW 160001 7 T
If the permittee took additional samples above the minimum specified in the permit, were all of the results reported on the Monitoring Report Forms?. [N.J.A.C. 7:14A- 6.8(e)]	IC		DSW 160001 8 T
Was annual and semi-annual wastewater testing conducted in different quarters during the permit cycle?. [N.J.A.C. 7:14A- 6.5(b)2]	IC	DSN 003, 004 and 005 quarters alternate.	DSW 160001 9 T
Were WCR samples collected at the same time as the Whole Effluent Toxicity samples?. [N.J.A.C. 7:14A- 6.5(b)2]	IC	Sampled together.	DSW 160001 10 T
Intake flow for DSN 001A shall be measured at the salt water pump station using a calculated method. Effluent Flow shall be measured using a flow meter for DSN 001A and DSN 002A. Flow shall be calculated for DSN 003A, DSN 004A, and DSN 005A using the calculated stormwater runoff during rain events during the monitoring period and calculated cooling water flows based on the process units in service during the monitoring period. [N.J.A.C. 7:14A- 6.5(a)1]	IC	Calibrated annually.	DSW 160001 13 T
Net concentration limitations for DSN 001A shall be calculated by using the following formula: [(gross effluent concentration)*(gross effluent flow) - (intake concentration)*(intake flow)] / [gross effluent flow]. The permittee is eligible for intake credit only for the Arthur Kill intake water. Any pollutants present in the Dam #2 overflow do not meet the provisions at N.J.A.C. 7:14A-13.4; therefore, the permittee can pursue an affirmative defense if a violation occurs from Dam #2 pollutant contributions. [N.J.A.C. 7:14A- 6.2(a)1]	DC	Permittee info.	DSW 160001 16 T
Automatic composite samplers and flow-weighted samples are preferred for both DSN 001A and DSN 002A. However, 24-hour composite samples collected at each monitoring point may be time proportioned consisting of a minimum of 6 aliquots or grab samples collected at equal time intervals (e.g., every 4 hours when 6 samples are planned to be collected).	IC	24 hour composites.	DSW 160001 18 T
RECORDKEEPING	H		DSW 160001 19 T

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46318 B 0 - Industrial Wastewater

Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
Does the permittee appropriately retain monitoring records? . [N.J.A.C. 7:14A- 6.6(a)]	IC	On site and available.	DSW 160001 21 T
REPORTING	H		DSW 160001 23 T
Did the permittee complete monitoring reports in accordance with the current Discharge Monitoring Report Manual and any updates?. [N.J.A.C. 7:14A- 6.5(b)3]	IC	No DMR reporting deficiencies noted.	DSW 160001 36 T
Did the permittee report "CODE=N" as required by the permit?. [N.J.A.C. 7:14A- 6.5(b)3]	IC		DSW 160001 37 T
Contaminated Stormwater Allocation	S		DSW 160001 40 T
The USEPA Petroleum Refining Point Source Category Effluent Limitation Guidelines and Standards (ELGs), 40 CFR Part 419.22 (e), provide for permittees to receive an additional allocation for treating contaminated stormwater for BOD5, TOC, TSS, Oil and Grease, Phenolic Compounds, Total Chromium and Hexavalent Chromium prior to discharge to a surface waterbody. As the ELG's only establish credit for treated stormwater discharges, the permittee must route any stormwater through the treatment plant during the monitoring period, and subsequently discharge it through outfall DSN 002A, to be eligible for this credit. The additional allocation is incorporated by using equations to calculate the reported mass discharge values considering the contribution of contaminants from the stormwater. Therefore, the permittee's discharge limits for these parameters at DSN 002A are always the same; however, credit for stormwater is applied when the permittee calculates its individual discharge amount for each parameter on its DMR. The permittee is required to monitor the stormwater flow and report this value on its monthly DMR's under the "Flow, In Conduit or thru Treatment Plant" parameter for DSN 002A where the Sample Point is specified as "Precipitation". In the event that there is no stormwater flow routed through the treatment plant, a credit does not apply and the "Calculated Adjustment" value is zero.	DC	Permittee info.	DSW 160001 41 T

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46318 B 0 - Industrial Wastewater

Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
The allocation is calculated by using the following formula: Mass Load For Pollutants (kg/d) = (Stormwater Flow Rate, kgal/day) from DSN 002A x (Effluent Limit Factor for Pollutant, lb/k gal) / 2.2 lbs/kg The effluent limit factors from 40 CFR 419.23 are summarized below: BAT effluent limitations for contaminated runoff in English units (pounds per 1,000 gallons of flow) Pollutant Maximum for any 1 day Average of daily values for 30 consecutive days shall not exceed BOD5 0.40 0.22 TSS 0.28 0.18 TOC 0.88 0.48 Oil and Grease 0.13 0.067 Phenolic compounds (4AAP) 0.0029 0.0014 Total chromium 0.0050 0.0018 Hexavalent chromium 0.00052 0.00023 pH range (S.U.) 6.0-9.0 6.0-9.0.	DC	Permittee info.	DSW 160001 42 T
After calculating the loading allocation value and reporting such on the DMR for DSN 002A under "Calculated Adjustment", the permittee shall subtract this loading allocation due to stormwater from the actual gross loading leaving the treatment plant that is reported on the DMR for DSN 002A under "Effluent Gross Value". This value will represent the calculated process wastewater loadings and shall be reported on the DMR form for DSN 002A under the sampling location of "Effluent Adjusted Value". In other words, the following equation should be utilized: Effluent Adjusted Value = Effluent Gross Value - Calculated Adjustment.	DC	Permittee info.	DSW 160001 43 T
Dilution Studies	S		DSW 160001 65 T
Submit the Dilution Study Final Report: within 36 months from the effective date of the permit (EDP). [N.J.A.C. 7:14A- 2.12(b)]	IC	Final report submitted on 8/19/16.	DSW 160001 68 S
Polychlorinated Biphenyls (PCB) Monitoring for DSN 002A	S		DSW 160001 69 T
Did the permittee perform sampling for the 209 PCB congeners within 24 months after the effective date of the permit modification/permit?. [N.J.A.C. 7:14A-11.13(c)1 and 2]	IC	PCB sampling report completed 12/15.	DSW 160001 71 T

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Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
DISCHARGE REQUIREMENTS.	S		DSW 160001 98 T
Did the permittee discharge only at the authorized location(s)?. [N.J.A.C. 7:14A-13.16(a) 1]	IC		DSW 160001 99 T
Was there a discharge of or evidence of foam in the receiving stream?. [N.J.A.C. 7:14A-12.6(a)]	IC	No unusual foam noted.	DSW 160001 100 T
Was there a discharge of objectionable color or odor in the receiving stream? . [N.J.A.C. 7:14A-12.6(a)3]	IC	No unusual color/odor noted.	DSW 160001 101 T
Did the discharge exhibit a visible sheen? . [N.J.A.C. 7:14A-12.8(c)]	ON	Visible sheen noted behind boom in front of DSN 004 outfall on June 20. Slight sheen noted on October 29 in same location.	DSW 160001 102 T
The Department has approved the permittee's request to use the following corrosion inhibitors, biocides, or other cooling water additives in its non-contact cooling water: sodium bromide, bleach, Clam-Trol CT-2, DTS (inert detoxicant), Bio-Trol 88P, Betz 455 Deposit Control, or similar chemical compounds due to changes in vendors or names. Approved chemicals specifically for use in the Polypropylene and Infineum Chemical Cooling Tower water include: Phosphate based corrosion inhibitors (Trasar N-23265, N-73282, N-73286 or similar), sodium bromide (Acti-Brom N-7342, Spectrus OX1201 or similar), glutaraldehyde (N-7338 or similar), biodispersant (Spectrus BD1500 or similar), Continuum AEC3157 or similar, Spectrus NX1100 or similar, and bleach". If the permittee decides to begin using any additional additives in the future, the permittee must notify the Bureau of Surface Water Permitting at least 180 days prior to use so that the permit may be reopened to incorporate any additional limitations deemed necessary. [N.J.A.C. 7:14A- 6.7(b)]	DC	Permittee info.	DSW 160001 105 T
OPERATION, MAINTENANCE, AND EMERGENCY CONDITIONS.	S		DSW 160001 120 T
Does the permittee operate and maintain the treatment works as specified in the O&M Manual?. [N.J.A.C. 7:14A- 6.12(a)]	ON	No O&M Manual for the operation of the PE Pellet Separator. See the cover letter.	DSW 160001 121 T
ACUTE WHOLE EFFLUENT TOXICITY TESTING.	S		DSW 160001 127 T

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46318 B 0 - Industrial Wastewater

Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
Part III of this permit contains an Action Level (AL) for acute Whole Effluent Toxicity for DSN 001A and DSN 002A. Toxicity Reduction and Implementation Requirements may be triggered based on exceedences of this Action Level. See Toxicity Reduction and Implementation Requirements section below for more details. [N.J.A.C. 7:14A-13.6(a)]	IC	Acute toxicity results have been good.	DSW 160001 130 T
Submit an acute whole effluent toxicity test report: within twenty-five days after the end of every quarterly monitoring period beginning from the effective date of the permit (EDP). The permittee shall submit toxicity test results on appropriate forms. [N.J.A.C. 7:14A-13.6(a)]	IC	Submitted timely.	DSW 160001 140 S
CHRONIC WHOLE EFFLUENT TOXICITY.	S		DSW 160001 143 T
Submit a chronic whole effluent toxicity test report: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). The permittee shall submit toxicity test results on appropriate forms. [N.J.A.C. 7:14A-13.6(a)]	IC	Chronic toxicity at DSN 003, 004 and 005 have been good.	DSW 160001 157 S
Were any and all outfall pipes tagged?. [N.J.A.C. 7:14A- 6.2(a)9]	IC	Properly tagged. Large signs.	DSW 160001 192 T
The Impingement Alternatives Analysis shall address the following factors at the Salt Water Pump Station:.	DC	Heading.	DSW 160001 223 T
Replacement of the existing screens with Ristroph screens having a dual spraywash system (high-and-low-pressure). The screens shall have fish lifting buckets to hold the fish in water as they are lifted to the low-pressure spraywash removal system. The screen size shall be optimized to minimize impingement mortality and the wire mesh shall have a smooth face. These screens shall be operated continuously exclusive of periods of maintenance or operational requirements.	NA	Not yet done.	DSW 160001 224 T

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Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
Installation of a fish return system for the intake structure that is designed and constructed in consideration of the following factors: 1) using a fiberglass composite or a similar non-abrasive material that will be added to the full length of the interior surface trough of the fish return; 2) a material that will reduce abrasion and obstructions to fish; 3) designed to have sufficient capacity, flow volume and water level to facilitate safe return of impinged organisms to the Arthur Kill; and 4) designed so that the fish return conveyance terminus is submerged at all tidal stages on a year-round basis.	NA	Not yet done.	DSW 160001 225 T
The permittee shall submit the Impingement Alternatives Analysis on or before EDP + 15 months to the following address: New Jersey Department of Environmental Protection 401-02B Division of Water Quality Bureau of Surface Water Permitting 401 East State Street P.O. Box 420 Trenton, New Jersey 08625-0420.	IC	Mailed to NJDEP 12/23/2014.	DSW 160001 228 T
Upon receipt of the Impingement Alternatives Analysis, the Department will evaluate the findings in concert with the final EPA regulations and will reopen the permit to incorporate permit conditions pursuant to N.J.A.C. 7:14A-16.4.	NA	Not yet done.	DSW 160001 229 T
Oil and Grease Method for DSN 001A and DSN 002A	S		DSW 160001 239 T
Oil & Grease is to be analyzed by the Total Petroleum Hydrocarbon (TPH) EPA Method 1664A or equivalent. The permittee shall report the TPH results under the Oil & Grease parameter on the DMRs.	IC	Done.	DSW 160001 240 T
Clean Water Discharges	S		DSW 160001 243 T

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Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
The following discharges are authorized in this permit as they are clean in nature. Some of these discharges drain to Morses Creek and are therefore regulated at DSN 001A. Discharges are as follows: Marine Dock Fire Fighting Water: test water to ensure system operability, maintenance, inspection, or testing SWPS Suction Water: siphon used during pump start up and priming of pumps SWPS Intake Wash Water: intake water used to wash off debris that collects on intake screens SWPS Emergency Sump Pump Water: used if there was a large upset to prevent flooding in the SWPS building SWPS Pump P-11 Condenser Water: jet condenser used to improve efficiency of the steam turbine Marine Dock and SWPS Steam Condensate: condensate discharges from miscellaneous steam traps Polypropylene Plant Boiler Blowdown Polypropylene Plant Pellet Separator Water Hydrogen Plant Condensate/ Brine from Reverse Osmosis Treatment Cooling Water Strainers at Inlet of Process Units Morses Creek Pump Stations: for firefighting water pressure maintenance Ponded Water: pumped from adjacent cemetary property Potable Water: pumped to on-site resevoirs to prevent freezing of city water lines and to control levels during dry periods Reservoir Water: water taken and returned to resevoirs for firefighting testing.	ON	Unpermitted discharge of PE Pellets and fluff from your Polypropylene plant. See the cover letter for details.	DSW 160001 244 T
Temperature at DSN 001A	S		DSW 160001 245 T
"Temperature Difference between Intake and Discharge" as found in Part III is defined as the discharge temperature as measured at DSN 001A minus intake temperature as measured at the Arthur Kill cooling water intake. The difference is a daily average of 24 hours. MBTU/ hr means the temperature difference times the weight of water in pounds discharged in one hour. The rate is a daily average of 24 hours.	IC	Temp limitation has been met since the previous inspection.	DSW 160001 246 T
Use of Rhodamine WT Dye	S		DSW 160001 247 T
The permittee is authorized to perform periodic testing using Rhodamine WT Dye as part of dilution studies, sewer investigations, and flow meter calibrations. Use of this dye is conditional on compliance with the following requirements:.	DC	Permittee info.	DSW 160001 248 T

IC - In Compliance	ND - Compliance Not Determined	N - No	NA - Not Applicable	PV - Potential Violation	H - Heading	NI - Not Inspected
NC - No Obvious Concern	ON - Out of Compliance, Non-referred	Y - Yes	OC - Out of Compliance	DC - Data Collection	S - Sub-Heading	RTC - Return to Compliance

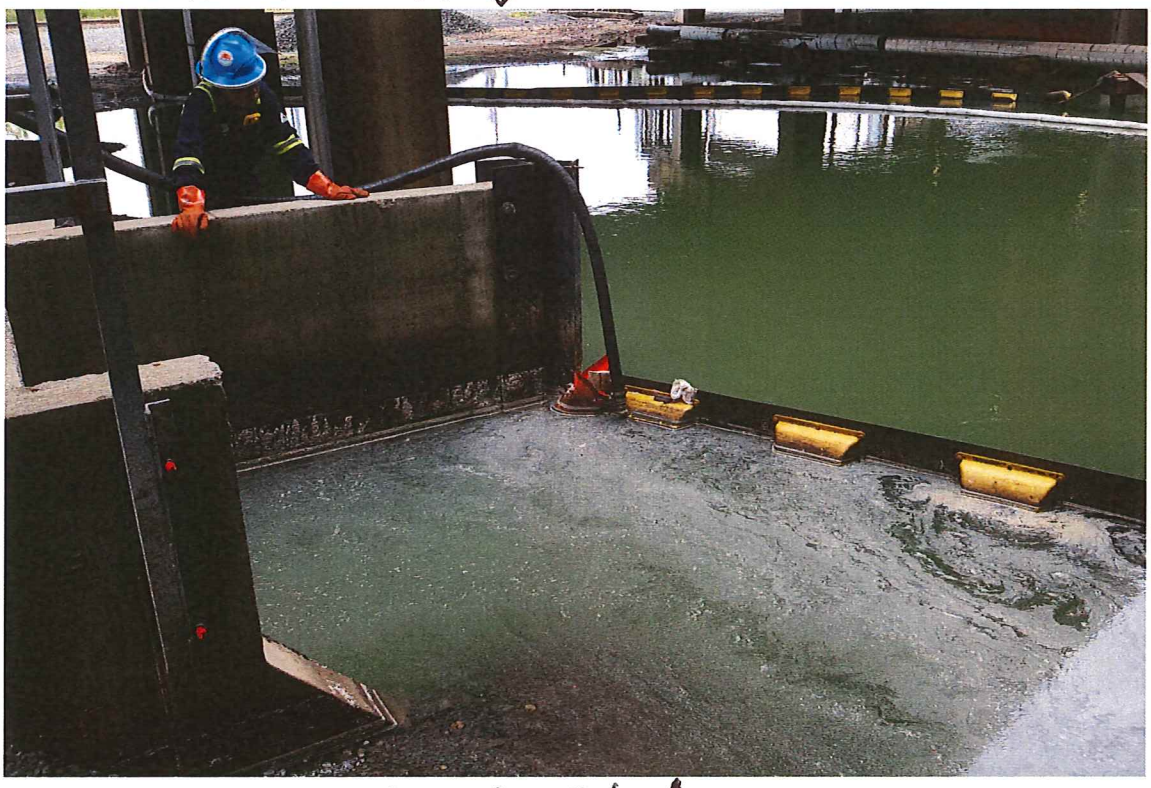
46318 B 0 - Industrial Wastewater

Requirement	Status RTC	Results or Comments	Reqt Source Ref # Reqt. Type
Provide written notification to the Chief, Bureau of Surface Water Permitting and the Bureau of Water Compliance and Enforcement prior to the use of Rhodamine WT dye. This notification shall include the expected dates of the discharge, the expected concentration of Rhodamine WT dye in the effluent, the expected outfall that will see the dye, and and the anticipated concentration of dye to be used.	NA	No notifications made since the previous inspection.	DSW 160001 250 T

IC - In Compliance	ND - Compliance Not Determined	N - No	NA - Not Applicable	PV - Potential Violation	H - Heading	NI - Not Inspected
NC - No Obvious Concern	ON - Out of Compliance, Non-referred	Y - Yes	OC - Out of Compliance	DC - Data Collection	S - Sub-Heading	RTC - Return to Compliance

June 20, 2019

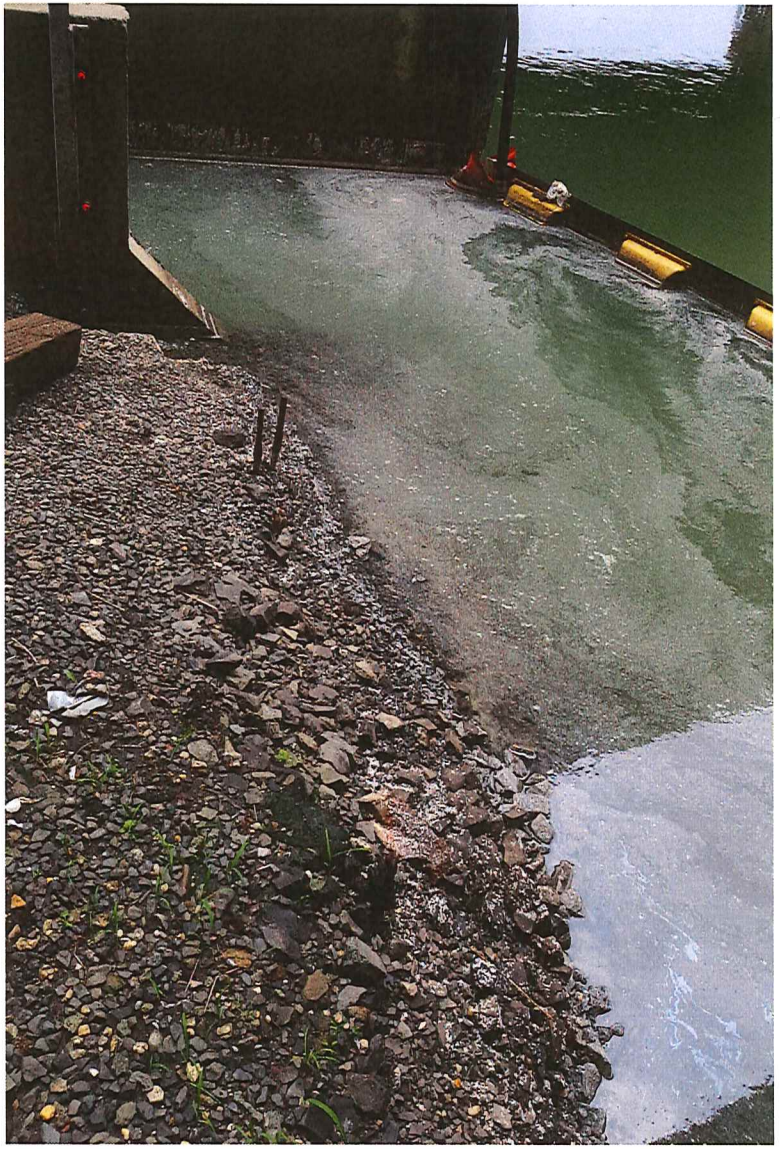
Vactor truck removing water from boomed area under Turnpike. Near DSN 005 outfall. ↓ ↑



Note heavy accumulation of pellets. ↑

June 20, 2019

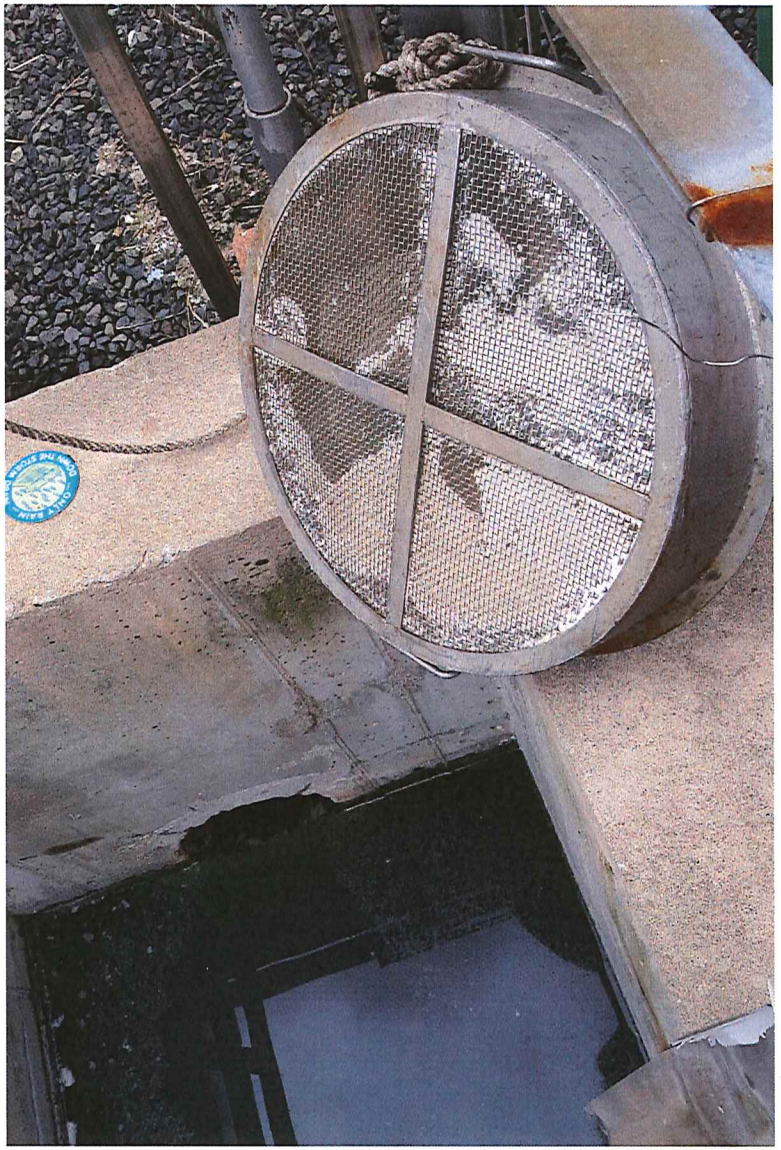
Close-up of pellets on shore banks. ↑
In boomed area near DSN 005.



Closeup of pellets on shore bank and floating in water. ↑

June 20, 2019

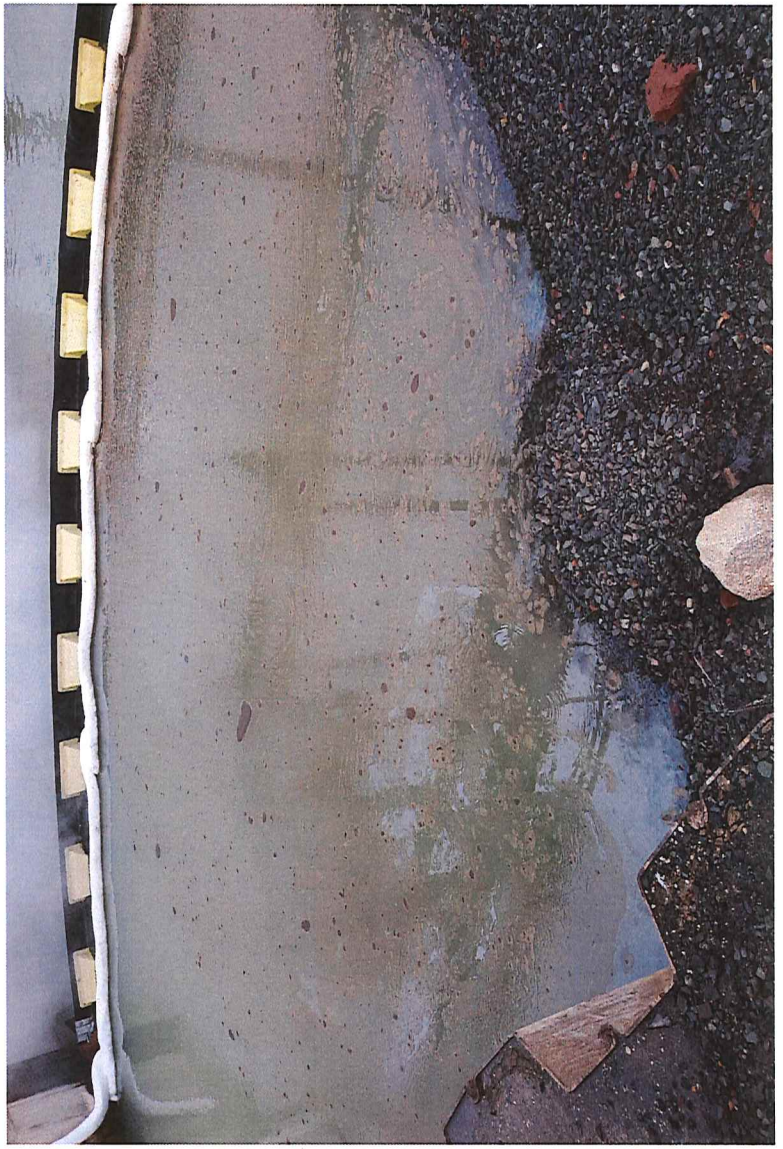
PE pellets escaping outfall to Morses Creek. ↑



Outfall screen cover not in place to capture pellets. ↑

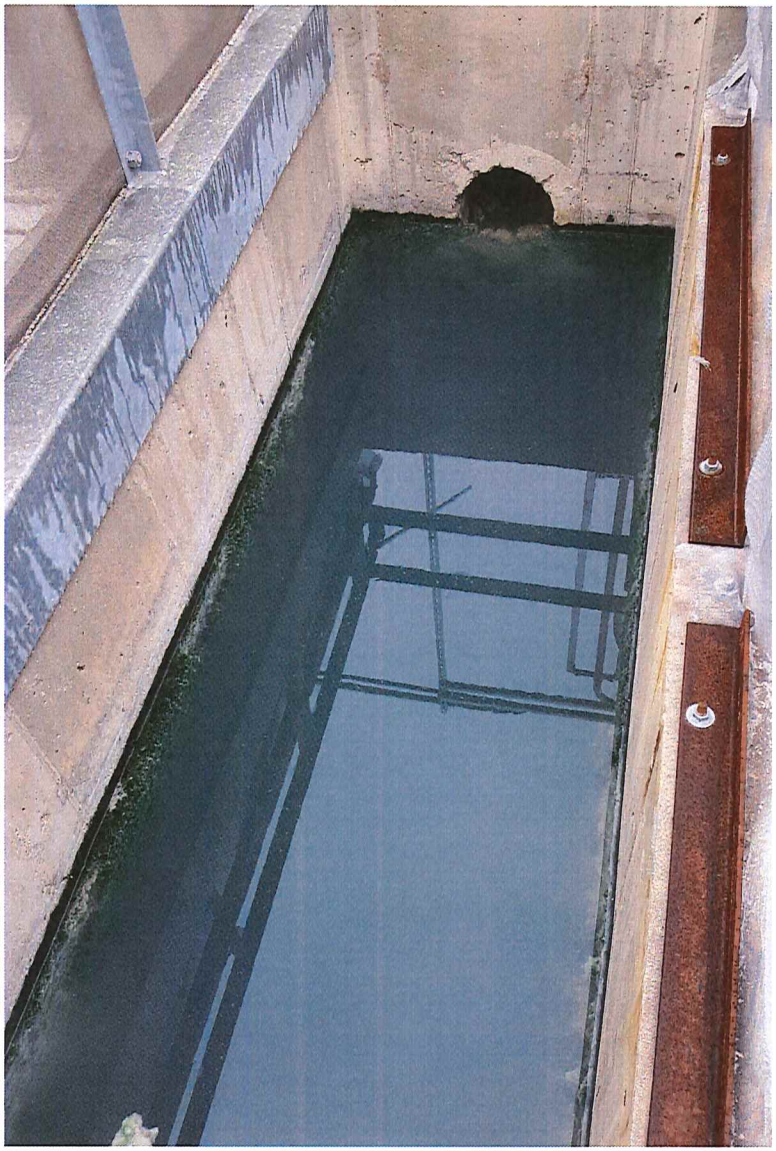
June 20, 2019

Aggitators added to PE pellet separator. Prevented pellets from floating to be separated and removed. ↑

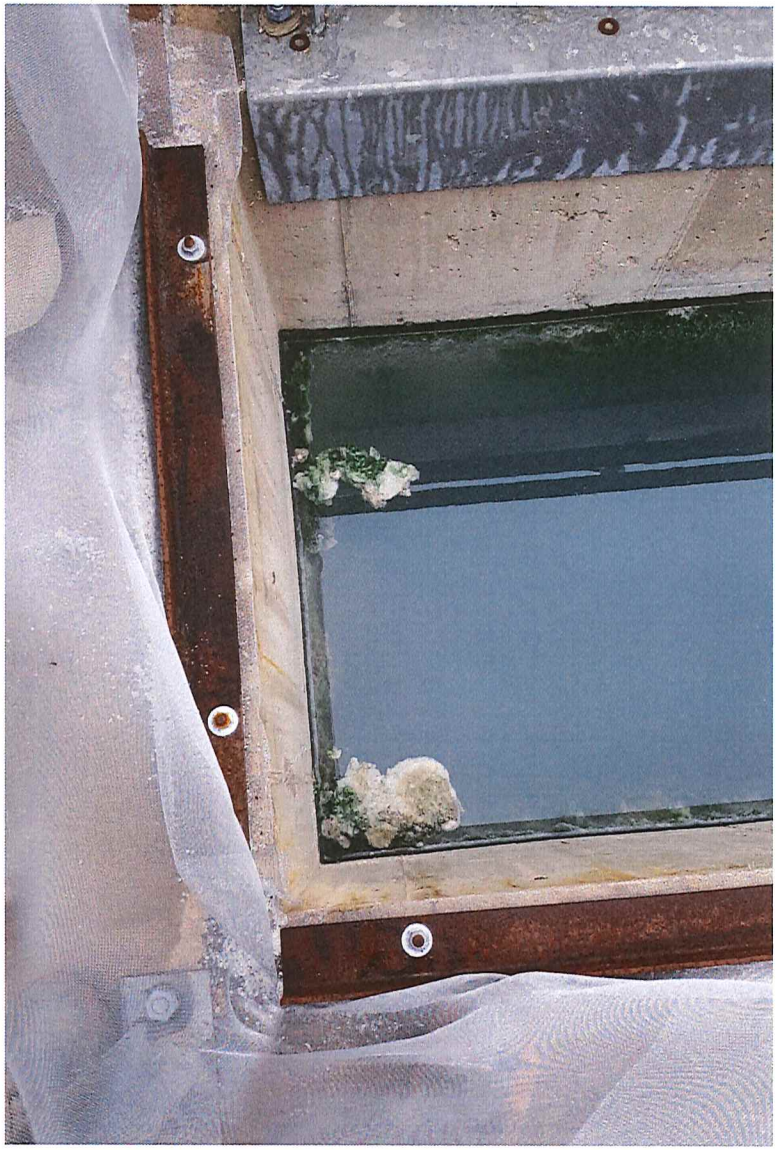


Oily sheen noted at DSN 004 outfall. ↑

October 29, 2019



White material accumulated on the walls of the final discharge chamber of the PE pellet separator.

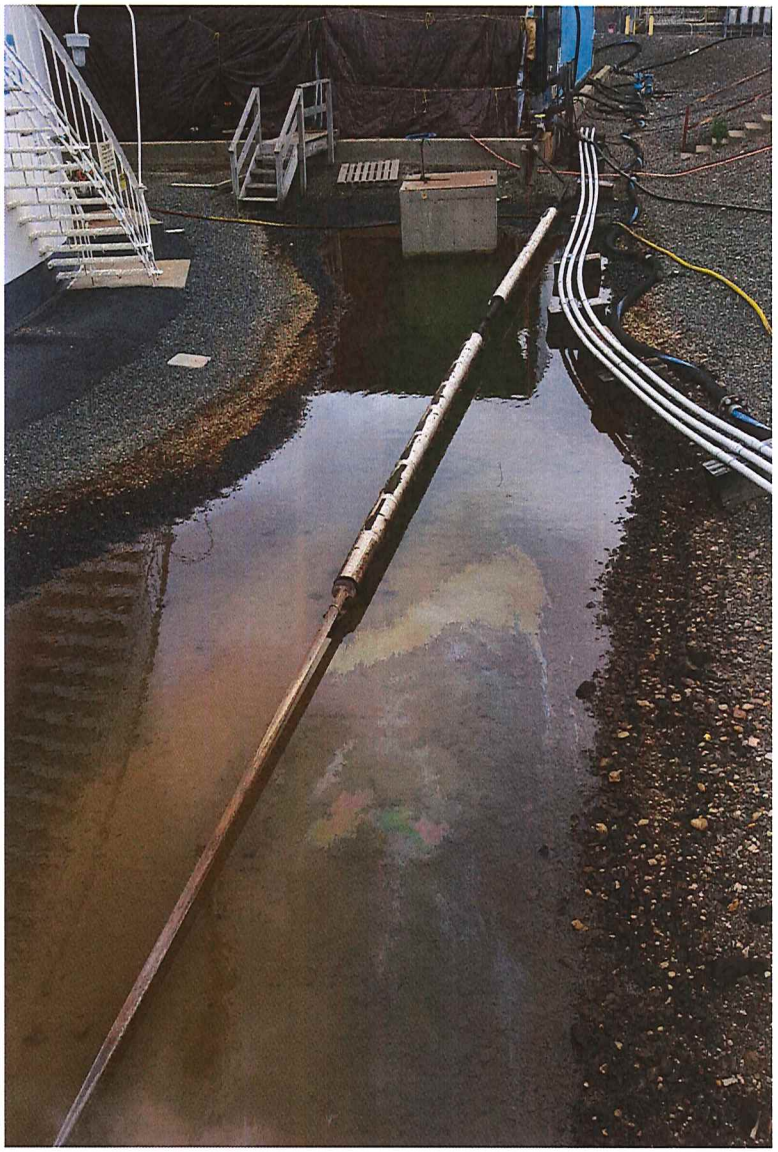


Close up of white material accumulating in separator. This writer believes it is the fluff material.

October 29, 2019

PE pellets ~~still~~ Still collected at boomed area in Morses Creek by DSN 005. Much less than observed on June 20. ↓

June 13, 2019



Process sewer overflow between tanks 132 and 133. Note sheen on surface and staining on rocks.

State of New Jersey

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL BUREAU OF WATER COMPLIANCE & ENFORCEMENT
Mail Code 44-03/P.O. BOX 420
401 EAST STATE STREET
Trenton, NJ 08625-0420
Tel: (609) 292-3010 Fax: (609) 292-6450

CATHERINE R. McCABE
Commissioner

NOTICE OF VIOLATION

EA ID #: PEA190001 - 46318

Name of violator: Phillips 66 Co
Location: 1400 Park Ave, Linden City, New Jersey 07036
Identifying #: 46318
Person interviewed and title: George Bakun, Environmental Engineer, cell phone #973-769-5083.

You are hereby NOTIFIED that during a compliance evaluation at the above location on 6/12/2019, the following violation of the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and the New Jersey Pollutant Discharge Elimination System regulations (N.J.A.C. 7:14A-1 et seq.) was observed:

> Requirement: Pursuant to N.J.A.C. 7:14A- 6.2(a)1, the operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state, except as specifically authorized by a valid NJPDES permit.
>
> Description of Noncompliance: Unpermitted discharge of PE pellets and fluff from the Polypropylene Plant's treatment separator that was being improperly operated. P66 Permit requires this discharge to be "clean in nature". See the inspection report cover letter for additional details.

You must take the following corrective actions:

1. P66 shall immediately operate the Polypropylene Plant's treatment separator as designed. Within 30 days of receipt of this NOV, P66 shall create an O&M Manual for the proper operation of this separator. A copy of the O&M Manual shall be sent to this writer for review and comment.
2. P66 shall employ additional measures to ensure that PE pellets are fluff are not discharged from the separator to the Morses Creek and the surface waters of the State. This might include secondary screens and/or other provisions. As an overall solution, the Department strongly recommends that P66 consider re-routing this discharge to its process sewer. See the attached inspection report cover letter. [N.J.A.C. 7:14A- 6.2(a)1]

This Notice of Violation serves as notice that the NJDEP, Water Compliance and Enforcement, has determined that a violation has occurred. It does not constitute final agency action and may not be appealed or contested. The issuance of this Notice or compliance therewith does not preclude the State of New Jersey or any of its agencies from initiating formal administrative and/or judicial enforcement action (including assessment of penalties), with respect to the violations listed above or for any other violations. You **may** appeal or contest such formal actions. Violations of the above regulations are subject to penalties of up to $50,000 per day/offense.

Issued by: Andrew Coleman Date: December 26, 2019
Print Name

Signature:
Sign Name